WHAT IS CLAIMED IS:

1.   An apparatus obtaining an edge image of a moving object, comprising:

an image capturing unit capturing an image of an object, said image capturing unit capturing a first image and a second image at a time different than said first image, said second image having a background identical to that of said first image; and

a controller exerting control to obtain a first differential image based on said first image and a second differential image based on at least one image including said second image and perform an operation on said first and second differential images to produce an edge image of a moving object.

2.   The apparatus of claim 1, wherein said first differential image is an image obtained by calculating a spatial difference of said first image and said second differential image is an image obtained by calculating a motion difference of said first and second images.

3.   The apparatus of claim 1, wherein said controller binarizes each of said first and second differential images prior to said operation.

4.   The apparatus of claim 1, wherein said operation includes an operation logically ANDing together said first and second differential images, or logically ORing said first and second differential images.

5.   The apparatus of claim 1, wherein said controller after said operation exerts control to perform a thin line process or a noise removal process to produce said edge image.

6.   The apparatus of claim 2, wherein said second differential image is the image obtained by calculating the motion difference of said first and second images and further calculating a spatial difference of said motion difference.

7.   A method of obtaining an edge image of a moving object, comprising the steps of:

capturing an image of an object, said image including a first image and a second image having a background identical to that of said first image and captured at a time different than said first image;

obtaining a first differential image based on said first image and a second differential image based on at least one image including said second image; and

performing an operation on said first and second differential images to produce an edge image of a moving object.

8.   The method of claim 7, wherein said first differential image is an image obtained by calculating a spatial difference of said first image and said second differential image is an image obtained by calculating a motion difference of said first and second images.

9.   The method of claim 7, further comprising the step of binarizing each of said first and second differential images prior to said operation.

10.   The method of claim 7, wherein said operation includes an operation logically ANDing together said first and second differential images, or logically ORing said first and second differential images.

11.   The method of claim 7, further comprising the step of performing a thin line process or a noise removal process after said operation.

12.   The method of claim 8, wherein said second differential image is the image obtained by calculating the motion difference of said first and second images and further calculating a spatial difference of said motion difference.

13.   A computer readable program product causing a computer to

obtain an edge image or a moving object, the product causing the computer
to execute the steps of:

 capturing an image of an object, said image including a first image

5 and a second image having a background identical to that of said first
image and captured at a time different than said first image;

 obtaining a first differential image based on said first image and a
second differential image based on at least one image including said second
image; and

10 performing an operation on said first and second differential images
to produce an edge image of a moving object.

 14. The program product of claim 12, wherein said first differential
image is an image obtained by calculating a spatial difference of said first
image and said second differential image is an image obtained by
calculating a motion difference of said first and second images.

 15. The program product of claim 12, further causing said computer
to execute prior to said operation the step of binarizing each of said first
and second differential images.

 16. The program product of claim 12, wherein said operation
includes an operation logically ANDing together said first and second
differential images, or logically ORing said first and second differential
images.

 17. The program product of claim 12, further causing said computer
to execute after said operation the step of performing a thin line process or
a noise removal process.

 18. The program product of claim 13, wherein said second
differential image is the image obtained by calculating the motion
difference of said first and second images and further calculating a spatial
difference of said motion difference.